

# Prioritized Technology: Low Mass, Low Power Instruments for Small Spacecraft

#### **Technical Goals**

#### Develop instruments to make measurements with resolution and sensitivity comparable to those made by Discovery class instruments within < 3U volume, 10 W power, and 10 kg mass.

## **Technical Status/SOA**

- Of 100 PSDS3-16 small sat proposals submitted 224 instruments were proposed. All utilized either COTS or commercially available instruments
- Of 54 PICASSO awards from ROSES 13-16, 27 if successful, would meet the technical goals
- Of 12 MatISSE awards from Roses 12-14, none would meet the technical goals (8 are rover instruments).

## **Mission Applications**

• The ability to field a large number of inexpensive spacecraft with even 1-2 instruments each could enable new science.

#### **Development Cost and Schedule**